

ABSTRACT OF THE DISCLOSURE

Two-shaft vacuum pumps are normally driven by asynchronous motors. The asynchronous motor rotors configured as cage rotors are relatively heavy and long and must therefore be supported by supporting bearings. The present invention provides a two-shaft vacuum pump with a simplified drive motor. The two-shaft vacuum pump has a synchronous motor as a drive motor, which motor rotor is permanently excited. Permanently excited motor rotors are smaller and of lighter weight such that rotor supporting bearings can be omitted. This also eliminates the problems associated with cooling and lubrication of support bearings.